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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,718	10/03/2003	Stacey M. Gage	MWS-031RCE2	9872

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EXAMINER	
OCHOA, JUAN CARLOS	
ART UNIT	PAPER NUMBER
2123	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/678,718	GAGE, STACEY M.	
	Examiner	Art Unit	
	JUAN C. OCHOA	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7-11,13,15-17,19-37 and 73-79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1, 3–5, 7–11, 13, 15–17, and 19–24* is/are allowed.

6)☒ Claim(s) *25-37 and 73-79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 3/13/09 has been received and considered. Claims 38–72 and 80–96 are cancelled. Claims 1, 3–5, 7–11, 13, 15–17, 19–37, and 73–79 are presented for examination.

2. Any previous indication of allowability of claims 25–37 and 73–79 is withdrawn.

Claim Rejections – 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 25–37 and 73–79 are rejected under 35 U.S.C. 103(a) as being unpatentable over AeroSim Blockset User's Guide, (AeroSim hereinafter) taken in view of David Followell, (Followell hereinafter), Enhancing Supportability Through Life-Cycle Definitions.

6. As to claim 25, AeroSim discloses a computer implemented system for **designing a target system** (see "AeroSim aeronautical simulation blockset provides a complete set of tools for the rapid **development of** nonlinear 6–degree–of–freedom **aircraft dynamic models**" in page 3, col. 2, last paragraph, lines 1–3) in which a planetary environment is one of the factors for designing the target system, the system comprising: a model storage for storing and providing models necessary to design the target system (see "library" in page 3, col. 2, last paragraph, lines 1–3); a design unit for designing the target system by utilizing the models provided by the model storage (see page 4, col. 2, last paragraph); and a **memory** for saving a model of the target system (see “The **library** also provides complete aircraft models” in page 4, col. 2, last paragraph).

7. While AeroSim discloses a computer–implemented method for **modeling a target system** (see "AeroSim aeronautical simulation blockset provides a complete set of tools for the rapid **development of** nonlinear 6–degree–of–freedom **aircraft dynamic models**" in page 3, col. 2, last paragraph, lines 1–3), AeroSim fails to disclose a non standard day atmosphere model.

8. Followell discloses component models belonging to a category of atmosphere models that include at least a non standard day atmosphere model (see page 406).

9. AeroSim and Followell are analogous art because they are related to flight dynamics.

10. Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to utilize the non standard day atmosphere model of

Followell in the AeroSim method because Followell introduces Mission Environmental Requirements Integration Technology Program (MERIT) created to provide decreased environmental definition costs, an optimum design for a given application, reduced cycle times and decreased life cycle warranty and maintenance costs, and as a result, Followell reports the following improvement over his prior art: systems which will fail less often, will need a smaller logistics tail, and be more supportable. (See page 402, col. 1, 1st paragraph).

11. As to claim 26, AeroSim discloses a system further comprising an execution unit for executing the target system designed in the design unit (see page 32, 1st and 2nd paragraphs).

12. As to claim 27, AeroSim discloses a system wherein the execution unit is realized through a process of automatic code generation from the design unit (see page 32, 2nd paragraph).

13. As to claim 28, AeroSim discloses a system wherein numerical representations of the models including data type, precision and data vectorization of the models are automatically derived from the context of using the models when executing the models (see page 32, 4th and 5th paragraphs).

14. As to claim 29, Followell discloses a system wherein the non–standard day atmosphere model includes a model incorporating a non–standard day atmosphere from one of military standard specifications MIL–HDBK–310 and MIL–STD–210C (see page 406).

15. As to claim 30, AeroSim discloses a system wherein the model storage includes standard atmosphere models (see page 3, col. 2, last line).

16. As to claim 31, AeroSim discloses a system wherein the standard atmosphere model includes a Committee on Extension to the Standard Atmosphere (COESA) atmosphere model (see page 3, col. 2, last line).

17. Claim 31, has been given a broad reasonable interpretation by the Examiner. The Examiner notes that the implementation disclosed in (page 3, col. 2, last line) is functionally equivalent to the results produced by the implementation expressly claimed in Applicant's dependent claim 31. Therefore, the "product" that is produced by performing the implementation disclosed in dependent claim 31 is the functional equivalent of the "product" that is produced in (page 3, col. 2, last line). Although the "implementation" by which the end result is different, the final result for the "implementation" is identical.

18. As to claim 32, AeroSim discloses a system wherein the models provided from the model storage are represented in symbols (see page 4, Fig. 2).

19. As to claim 33, AeroSim discloses a system wherein the symbols include blocks (see page 3, col. 2, last paragraph, lines 1–3).

20. As to claim 34, AeroSim discloses a system wherein the design unit provides a user interface to enter parameters for each block of the target system in response to an action taken by users (see page 32, 4th paragraph).

21. As to claim 35, AeroSim discloses a system wherein the user interface is provided in response to users clicking each block of the target system (see page 41, 2nd paragraph).

22. As to claim 36, AeroSim discloses a system wherein the user interface provides an option to select one of the atmosphere models in the model storage (see page 41, 2nd paragraph and “atmosphere” block in Fig. 31).

23. As to claim 37, AeroSim discloses a system wherein the atmosphere models in the model storage are provided in the user interface in response to an action taken by users (see page 41, 2nd paragraph and “atmosphere” block in Fig. 31, as well as page 62).

24. As to claim 73, AeroSim discloses a computer–readable medium holding instructions executable in a computer for the **design of a target system** (see "AeroSim aeronautical simulation blockset provides a complete set of tools for the rapid **development of** nonlinear 6–degree–of–freedom **aircraft dynamic models**" in page 3, col. 2, last paragraph, lines 1–3), wherein a planetary environment is one of the factors for designing the target system, the instructions comprising: instructions for providing atmosphere models necessary to design the target system (see "library" in page 3, col. 2, last paragraph, lines 1–3); and instructions for incorporating the atmosphere models to the target system (see page 4, col. 2, last paragraph).

25. Followell discloses component models belonging to a category of atmosphere models that include at least a non standard day atmosphere model (see page 406).

26. As to claim 74, AeroSim discloses a medium further holding instructions for executing behavior of the target system designed (see page 32, 1st and 2nd paragraphs).

27. As to claim 75, AeroSim discloses a medium wherein the atmosphere models are represented by blocks (see page 3, col. 2, last paragraph, lines 1–3).

28. As to claim 76, AeroSim discloses a medium wherein the instructions for incorporating comprises instructions for providing a graphical user interface in response to an action taken by a user (see page 32, 4th paragraph).

29. As to claim 77, AeroSim discloses a medium wherein the graphical user interface is provided in response to users clicking the blocks representing atmospheric models (see page 41, 2nd paragraph).

30. As to claim 78, AeroSim discloses a medium wherein the graphical user interface provides an option to change an atmosphere model to another atmosphere model (see page 41, 2nd paragraph and "atmosphere" block in Fig. 31).

31. As to claim 79, AeroSim discloses a medium wherein the graphical user interface provides blanks to enter parameters of the atmosphere models to produce outputs of the atmosphere models (see page 32, 4th paragraph).

Allowable Subject Matter

32. Claims 1, 3–5, 7–11, 13, 15–17, and 19–24 are allowed.

33. A reason for the indication of allowable subject matter was provided in the office action submitted 12/19/2008.

Response to Arguments

34. Applicant's arguments filed 3/13/09 have been fully considered but they are not persuasive.

35. Applicant's arguments regarding the Examiner's claim interpretation (see page 8, 5th paragraph to page 9, 1st paragraph), have been acknowledged. However, the Examiner would like to point out that the claim limitations only include what is enabled by the Specification.

36. Regarding the claim objections, claim is cancelled and the objections are withdrawn.

37. Regarding the rejections under 102 and 103, claims are cancelled and the rejections are withdrawn.

Conclusion

38. Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan C. Ochoa whose telephone number is (571) 272–2625. The examiner can normally be reached on 9:30AM – 6:00 PM.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571) 272–3753. The fax phone number for the organization where this application or proceeding is assigned is 571–273–8300.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair–direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866–217–9197 (toll–free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800–786–9199 (IN USA OR CANADA) or 571–272–1000.

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/J. C. O./ 06/05/09

Examiner, Art Unit 2123

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123